



Customized vaccination

Titer determination in puppies

Most puppies are vaccinated multiple times - at 6, 9 and 12 weeks
- because maternal antibodies are known to

ensure that a vaccination does not work. But is that enough?

How do you know whether your dog is protected?

Shortly after birth, puppies receive antibodies (antibodies) through their first mother's milk (colostrum or colostrum) that provide protection against infectious and deadly diseases. These so-called maternal antibodies are temporary and gradually disappear, but may be present in the puppies' blood for up to 20 weeks or more.

However, if the mother dog has no or too few antibodies, the puppies will not receive them through the colostrum and they will be unprotected! It is important to protect puppies at the right time by means of a vaccination that produces antibodies that ensure lasting immunity.

The purpose of a vaccination is to make dogs immune to certain diseases. However, it is a misconception to think that all animals that have been vaccinated are actually vaccinated

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be protected. Vaccines are not always successful in young animals that are still protected by the maternal antibodies. Puppies are usually vaccinated at 6, 9 and 12 weeks. They are then given one last vaccine at one year and after that they are vaccinated against infectious hepatitis, parvo and distemper every 3 years.

Most puppies are vaccinated multiple times because maternal antibodies are known to cause a

vaccination fails. By administering a vaccine regularly, every three weeks, there is a chance that one will catch. The problem lies in the fact that most puppies already receive their last vaccination at 12 weeks. Because the maternal immunity can last up to 20 weeks and sometimes even longer, the vaccination does not work and there is a high chance that they will then walk around unprotected until the next vaccination, which is given at the age of 1 year. People wrongly think that their dog is optimally protected by this vaccine, while it is still at risk of contracting and spreading diseases. They go unprotected to dog schools, boarding houses, shows and competitions, animal events, walking fields and so on.

Optimal vaccination schedules It

would be much better and more responsible to adjust the current vaccination schedule according to the vaccination guidelines of the WSAVA. The WSAVA is a scientific committee that sets worldwide guidelines regarding the vaccination of dogs and cats. These guidelines state, among other things, that it is not wise to administer the last vaccination before the age of 16 weeks. There are then two options: 1. a titre determination at 20 weeks. If the

result

is positive, the dog does not need to receive an additional vaccination and the animal can be titrated again after a certain period of time, depending on the result. 2. Advance the vaccination normally given at 1 year to 26 weeks. This is to prevent the animal from walking around unprotected until the age of 1 year.

Most puppy buyers get a puppy that has already been vaccinated once (often around 6 weeks) from the litter. Such a puppy can be titrated 3 weeks after vaccination.

At that time, it is not always clear whether the antibodies that are measured come from the mother or from the vaccine. Therefore, a re-titration should be done a few weeks later. If the titres then appear to have dropped, then it is certain that these are maternal antibodies. Depending on the level of the titers at that time, the puppy can then be vaccinated or re-titrated at intervals of a few weeks

'The most commonly used titre test is VacchiCheck. This is reliable and can be carried out by the vet himself. Only a very small drop of blood is needed and the result is known within half an hour. The veterinary surgeon must indicate in the vaccination booklet for how long the dog is protected and in this way a validity period is linked to the statement, according to the Board of Directors, Dibevo, KNMvD, NVWA and KMSH.


More information about titration and the guidelines of the WSAVA can be found at: www.vaccicheck.nl

until these are low enough to successfully vaccinate. If the titres have remained the same, this is a sign that the vaccination has been successful. What is unfortunate is that most puppies usually only have a vaccination against distemper and parvo, so they still have to be vaccinated with a cocktail that also contains contagious hepatitis.

Tit first The best

and most effective method is to perform a titer determination on a puppy that has not yet been vaccinated, just before it leaves the nest. If the test shows that there are still sufficient maternal antibodies present, then vaccination is useless. The antibodies will disable the vaccine. Then we will re-titrate the puppy, which is probably already with the new owner, after about 3 weeks. If the antibodies have fallen below the protective level and the level at which a vaccination can work, vaccination will be done with a cocktail containing attenuated live viruses of infectious hepatitis, distemper and parvovirus.

Subsequently, about 3 to 4 weeks after this vaccination, a titre determination is carried out again to see whether the puppy actually has enough antibodies in the blood and is protected against the diseases mentioned. If this is the case, it means that the dog is fully protected against the diseases mentioned by just 1 vaccination. Because the animal is still very young and immune

system has not yet been fully developed, a further titration can be carried out a year later to see whether the protection is still good. If this is the case, a titre determination can then be carried out every 3 years in accordance with the guidelines of the WSAVA. 

Some practical examples:



Each puppy has 1 bar and number.

In this example, we see the positive reference dot at the top and then the dots for infectious hepatitis, parvo, and distemper.

Strip/pup 4: The dot for parvo is clearly missing here. This dog is therefore not protected against this and must be vaccinated with a parvo vaccine. Everything else is fine.

Strip/pup 5: All dots are equal or darker than the positive reference dot. This dog is perfectly protected.

Positive reference

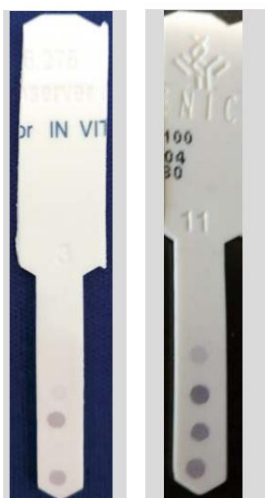
Infectious hepatitis

Parvo

Distemper

Taking a little blood is a piece of cake.





The strip on the left is of a young dog of 13 months old. Despite 3 vaccinations at 6, 9 and 12 weeks, this dog is not protected against parvo.

The dog was then vaccinated with a separate parvo vaccine and titrated 4 weeks later to check whether the vaccination had been successful.

This is clearly visible on the right strip. The 3rd dot from the top is the parvo dot and it is now dark, so fine.



A strip of a ten-week-old puppy that has not yet been vaccinated. If the classic vaccination schedule had been followed, this puppy would have been vaccinated 2 times already. The chances that these vaccinations would work are virtually nil.

The lower dot is 1 shade lighter than the upper positive reference dot but still dark enough to ensure that a vaccination is not effective. This pup will be titrated again in 3 weeks.

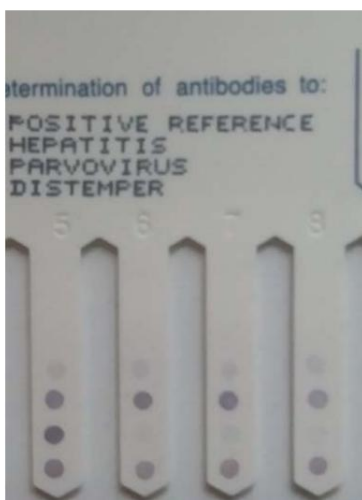
If the values are negative, he is vaccinated and re-titrated 4 weeks later for control.



Left image: The leftmost strip is of a bitch that was titrated well before pregnancy. She has high titers for all diseases.

The other strips are of her puppies that are titrated at 7 weeks. Despite the fact that these puppies have all drunk colostrum, they are no longer protected at 7 weeks and they received a vaccination against infectious hepatitis, parvo and distemper.

Right image: 5 of the 7 pups were re-titrated 5 weeks after vaccination to check whether it had been effective. Pup 4 has no parvo antibodies and was revaccinated with a separate parvo vaccine. The other puppies have very high antibody titres for all diseases and are therefore well protected. Because they are still very young, they will be titrated again in a year to be sure.



A beautiful example of 4 puppies from the same litter.

The strip on the far left is of a puppy that drank badly after giving birth and therefore received little or no colostrum with antibodies from the mother. As a result, at the time of the DHP vaccination he received at 8 weeks, he was no longer protected and the vaccine immediately took effect. This puppy is therefore immunized by 1 vaccination at the right time.

The other pups that did drink well still had enough maternal antibodies against parvo during the vaccination, so they didn't catch on. These pups received a separate parvo vaccine and should be re-titrated in 4 weeks for control.